

## TAXUS: AN ENDANGERED GENUS

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### ABSTRACT

*Gymnosperms are the plants of the unique origin. they have a strong different kinds of the life of the evolution in the phylogenetic pathway. the lineages of the lines goes in the different direction, In that case a single line of the evolution cannot be drawn for All taxa's.*

*In that scenario we are analyzing the genus Taxus of the coniferales. the genus is widely distributed in all part of the world. The belt of the plant can be found in the North and south America as well as some places of the Australia and the Germany. In India the plant can be found in the Himalayas as well as in the Nilgiri forest. However the data of the plants shows that the plant is near to endangerment, since habitat loss and the cutting of the forest of the Taxus is the key factors for the disappearance of the tree.*

*Conservation n efforts IN-STU as well as EX-SITU are required for the conservation of the tree.*

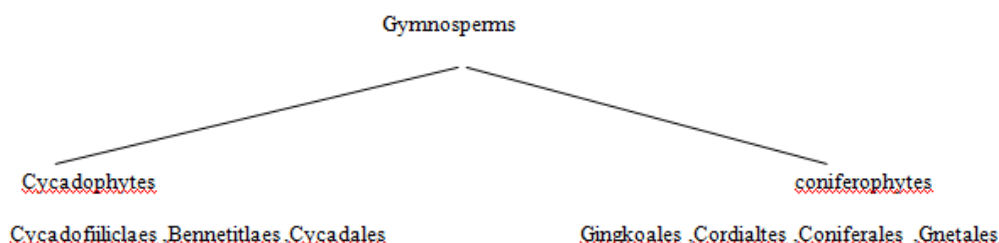
**KEYWORDS:** Taxus., Conservation, Hunting, Habitat Destruction, Evolution Lines

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### INTRODUCTION

Gymnosperm ( gymno: naked, sperm : seed ) are the plant which have the naked seed. i.e the seed are not encapsulated in any fruit. This is the key feature for the gymnosperm and the angiosperm palnts. Gymnosperm line of the evolution is very differ from the another plant cladistics, since gymnosperms are the heterogeneous assemblage of the different kind of the plants. the whole gymnosperms has been divided in to the three classes. one of them is the cycdephytes, another is the coniferophyte and the third one is the gnetophytes. The cycadophytes lines of the evolution is totally different from the another two lines, since most of the members o f the cycadophyte are now completely extinct in the course of the evolution..

Classification of the gymnosperm (chamberlain 1935)



**Taxus:** Belongs to the conifelraes. Coniferlaes are the sole (leaving some gnetophytes) representative of the whole gymnosperms.

**Taxus:** ( yew plant ) s follows the general life cycles of the gymnosperms. like all other gymnosperms the main body of the life cycles is the sporophytes. the gametophytic part of the body is concern onlt to the ganetes whicxh are of the short duration.

Taxus is the dioecious( some species ) or moecious plant. The average height of the plants is the around the 5-6 meter. It follows the typical cone nature. The leaves of the plant are of the long and the linear. The branches of the tree also follow the typical gymnosperm nature. The cone of the gymnosperm can be seen at the time of reproduction.



Figure 1: Taxus in the Natural Habitat

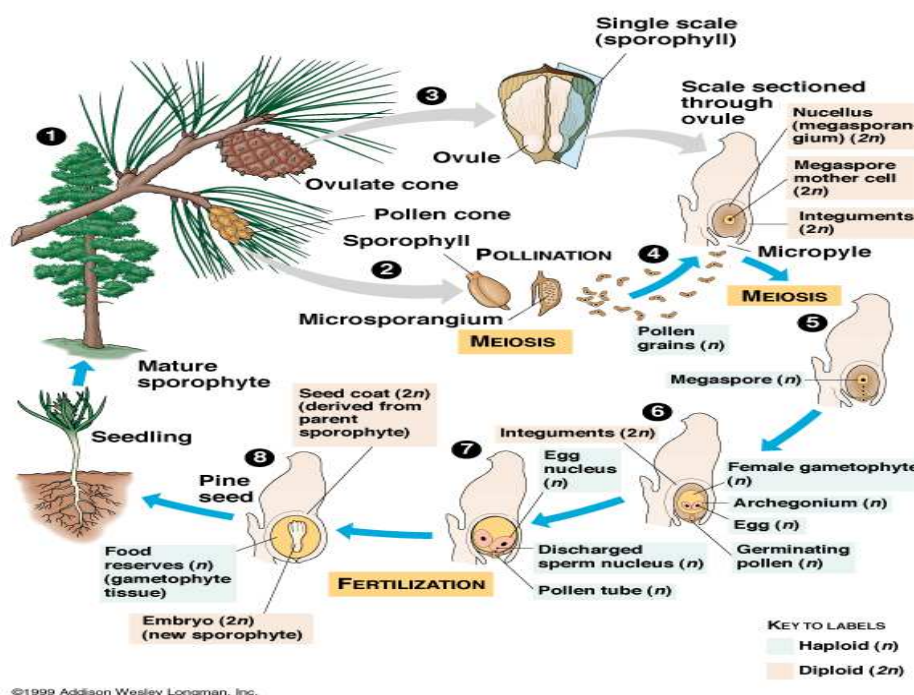


Figure 2: The Life Cycles of the Typical Gymnosperms

Distribution of the **Taxus** in the world: The distribution of the TAXUS can be shown by the following Map. Taxus is distributed in all parts of the world. Some of the countries where the plant can be shown are enlisted as, china, Iran Europe. Korea, Taiwan, Vietnam, North & south America ( silba 1986). in India the plant can be seen wildly in the Himalayan region.



**Figure 3: Distributions of the TAXUS**

Uses of the Taxus ; some of the most common application of the Taxus can be cited over there.

- The wood of the TAXUS is used of the commercial purposes. Wood of the Taxus is the hard wood; it is durable and has the long longevity.
- The body parts of the Taxus contain a number f the metabotles in the leaves, roots, fruit and the bark.
- The metabolites o f the eaves are of the specially important since they are of the anticancer in nature.A number of the research work is occurring on the leaves of the genus.
- The wood of the Taxus is utilized for the formation of the musical instrument.
- The plant is originally follows the gymnosperm pattern.so they are used for the ornamental purposes.In india as well in other european countries the plant is utilized for the ornamental purposes.
- The wood of the genus is used for the formation of the BOWS.
- Differ part of the plant are used for the phytotherapy purposes.
- The plant is used for the various region purposes in many tombs'
- The Himalayan (Indian Taxus ) yews has the anti-inflammatory and antianlagesic properties..
- The leaves and the stem metabolites also reported to be the antifungal and the antimicrobial of nature.

### **Conservation of the *Taxus***

In India as well as in the another art of the world this plant is degrading with the great speed.in India the belt of the yew plant can be seen in the Himalayas as well as in the nilgiri forest. However there are several reasons which are responsible for the degradation of the trees.some of the factors are enlisted as.

- Habitat destruction.
- Cutting o f the trees.
- Lack of the social awareness,
- Less government efforts.

Well IN-SITU and EX-SITU conservation of the tree are needed for the rapid propagation of the plant.

## CONCLUSIONS

Taxus is the genus of the economic importance. The leaves, of the tree has a immense application like they have a important anticancer properties. In addition the wood of the tree also of the higher values. from the phylogenetic point of view the plant represent the reservoirs of the character. so it is highly essential that the plant should be conserved.

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